Protecting Our Environment For Tomorrow

A public consultation paper for a strategy for waste management

GOVERNMENT OF
NEWFOUNDLAND AND LABRADOR

Department of Environment

Message from the Minister
Waste Management Advisory Committee

As Minister of Environment, I am committed to protecting the environment of Newfoundland and Labrador. It has become evident to me that the time has come to address the waste management situation in our province. There are approximately 240 landfill sites in the province, 10 times the number of our neighbouring Atlantic provinces combined, and most are operating at unacceptable standards. There are over 50 aging teepee incinerators which are not meeting national air emission standards and many are reaching the end of their useful life. Our current waste management practices cannot continue if we want to protect and preserve our environment for the enjoyment of future generations.

Both Government and the people of Newfoundland and Labrador must take responsibility for the management of our waste and find ways to improve our waste practices. The development of a provincial waste management strategy is vital if we are to ensure the health and well-being of our communities and the protection of our environment. We must explore options, and seek the advice and opinions of the people of our province to find a solution to our waste management problems. To do this, I have appointed a four-person Waste Management Advisory Committee, chaired by Newfoundland and Labrador Federation of Municipalities President Derm Flynn, to conduct a series of roundtable discussions throughout Newfoundland and Labrador.

We must address our current waste management issues today to ensure the preservation of our environment for tomorrow. I encourage you to participate in a roundtable discussion in your area or to submit written comments to the advisory committee. Together we will develop a new and progressive waste management strategy that will protect our province's environment for the enjoyment of all Newfoundlanders and Labradorians.

Ralph Wiseman
MHA Topsail
Minister of Environment

Message from the Chair
Waste Management Advisory Committee

Waste management is an important issue for all of us in Newfoundland and Labrador – even though not every one may realize it. It is too easy to put something inside a plastic bag, tie it shut, put it out at the end of the road and not give another thought to that bag, what is in it, and where it goes next.

We have done this for years and now, when we look around, we see that we have close to 240 waste disposal sites – many of them very close to communities and to roads and highways, many within a few kilometres of the next one. Do we need so many sites? What effect are they having on the environment? Can we do a better job of handling our waste?

As chair of the Waste Management Advisory Committee, I am pleased to have the opportunity to discuss the questions, concerns and benefits associated with improving our waste management practices with you. The Committee will prepare a report based on the information we receive from you and will provide it to the Minister of Environment as input in the development of a provincial strategy for waste management.

Derm Flynn
Chair
Waste Management Advisory Committee

PROTECTING OUR ENVIRONMENT FOR TOMORROW

A PUBLIC CONSULTATION PAPER FOR A STRATEGY FOR WASTE MANAGEMENT

MAY 2001

THE CHALLENGE OF WASTE MANAGEMENT

Effective solid waste management is a challenge for communities and governments throughout Canada.

In 1989, the provinces and territories of Canada agreed that the huge volumes of waste going to landfill sites was an issue of national concern. All ministers of Environment across Canada set a goal of 50 per cent reduction in waste to disposal by the year 2000.

In this province, we send an estimated 480,000 tonnes of material to approximately 240 landfill sites annually. Some of the major landfill sites in this province are at the end of their useful life span. The more than 50 aging teepee incinerators in use throughout the province do not meet national air emission requirements and Government has committed to phase them out by 2008. Open burning at waste sites has also been identified as a concern. Eliminating both teepee incinerators and open burning will reduce unacceptable air pollution.

Communities are seeing nuisance problems from poorly or improperly maintained landfill sites and concerns have been expressed that the many unsightly dumps are not in keeping with the expectations of our growing tourism industry. There is also a heightened awareness of potential pollution of the water bodies that are so essential to communities.

Doing nothing to change our waste management practices is no longer an option. There will be higher costs in the long term from doing nothing. Municipalities and the province must pay the high cost of maintaining our landfill sites and repairing and maintaining aging technologies.

In recent years, waste management initiatives have been a source of economic growth in all provinces, creating thousands of jobs nationally. Materials diverted from disposal through reduction, reuse, recycling and composting have provided a new resource. A new resource requires a new work force to handle and process materials and create valuable new products. Recycling companies have expanded, new enterprises have started up, and waste exchange programs are in place, all employing many Canadians. In our province, the beverage container deposit refund program alone directly supports the operation of 37 Green Depots, satellite depots and more than 100 full-time jobs.

Waste management is the responsibility of each of us – individuals, business and industry, communities and government. The provincial government must provide the framework for waste management by setting policy, regulations and standards. The planning and delivery of waste management is the direct responsibility of municipal governments.

In the March 13, 2001 Speech from the Throne, Government indicated its intention to develop a long-term strategy to address waste management and to seek the views of individuals, communities and other interested parties on that strategy. To accomplish this, the Minister of Environment has appointed an independent advisory committee, led by the Newfoundland and Labrador Federation of Municipalities, to meet with the public through a series of roundtable discussions. Written submissions from the public will also be accepted.

WHERE WE'VE COME FROM

Disposing of unsorted waste in a landfill site is the most common form of waste disposal in Newfoundland and Labrador. A 1992 survey found that only half of the 240 landfill sites in the province had controlled access, and only 25 per cent had site attendants. These conditions have led to uncontrolled fires at the sites, smoke, vermin, odours and excessive wind borne litter. Without knowing what materials are going into a landfill site, we cannot know what will gradually leach into the soil and nearby ponds or streams, nor can we take action to prevent these things from happening.

A recent study of air emission pollutants has shown that incinerators in our province produce more than one-third of the total volume of dioxins and furans from municipal incineration in Canada. Open burning, which was not measured and is common in more than half of the sites in the province, produces even more dioxins and furan emissions. The teepee incinerators are obsolete technology and they will be phased out over the next number of years.

Government has taken some steps toward responding to the challenges we face in dealing with solid waste management.

In 1994, Government instituted a ban on disposal of untreated sewage sludge and oil contaminated soil in landfills in the eastern region, later expanding this ban to other areas of the province.

In 1996, Government established the Multi-Materials Stewardship Board to develop, implement and, where appropriate, manage a variety of waste diversion strategies in Newfoundland and Labrador in accordance with Government priorities.

In January 1997, the deposit refund program for beverage containers, the first province-wide waste recycling diversion program, was initiated. To date, this program has been successful in diverting 50 per cent of beverage containers from landfills; has led to the establishment of 37 Green Depots and more than 100 jobs; and, reduced roadside litter.

In July 1997, Government established the Newfoundland and Labrador Waste Management Trust Fund. The trust fund provides financial assistance to aid in the development and implementation of waste management initiatives in the province. It is governed by provincial waste management regulations and administered by the Multi-Materials Stewardship Board under direction of the Minister of Environment. The principal source of funds for the trust fund is surplus revenues from the province's beverage container deposit refund system.

In April 1999 and October 2000, proposals to the trust fund for a variety of waste management initiatives resulted in funding for education and information projects, cleanups, school recycling programs, pilot projects on waste diversion, and funding for municipalities to investigate the practicality of regional waste management systems.

ALTERNATIVE APPROACHES TO SOLID WASTE MANAGEMENT

Waste Diversion

Waste diversion is an approach adopted in many jurisdictions across Canada. It is a proven way to reduce the amount of material going for disposal, thereby extending the life span of landfill sites and improving environmental conditions at those sites.

Successful waste diversion removes not only volume but specific types of material from the waste stream. Materials such as plastics, wood, newsprint, paper and organic materials can all be diverted from landfills through reduction, reuse, recycling and composting, which can create business and employment opportunities.

Typically, waste diversion can include:

- **Reduction**
  Reduction can be achieved through elimination of excess packaging and production of more durable goods.

- **Reuse**
  Reuse of materials in their original form can reduce the need for new production. Examples include refillable beverage containers, rechargeable batteries, reusable laser-printer cartridges, and the recovery of reusable doors and window frames from construction and demolition debris.

- **Recycling**
  Recycling can reduce the need for new material in the production of consumer goods. For example, recycled newsprint, corrugated cardboard and bond paper can replace much of the original fibre used to make paper products. Plastics, metals and glass can also be recovered from the waste stream and recycled as new products.

- **Composting**
  Most organic material, including fruit and vegetable wastes and many non-recyclable paper products, can be broken down through decomposition to form a rich soil. Compost can be used to enrich soil or as a cover material on disturbed lands, including landfills.

  Typically, organic material makes up 35-50 per cent of the solid waste put out for pick-up every week, by every household. Composting can be at source (households), at a community level or at large-scale commercial facilities.

  Removing organic material from the waste stream greatly reduces the volume going to landfills and reduces or eliminates nuisance problems, such as odour and pests, at the sites.

- **Waste Exchange**
  A system of waste exchange brings together potential users of waste materials with waste producers. A company having material that they cannot use at their facility

but which still has potential value may list the material with the exchange. This system can result in tonnes of material normally sent to a landfill site diverted into usable products.

Waste Disposal

No matter how effective waste diversion efforts are, there will always be material that must go for disposal. Landfilling and incineration are the two basic waste management technologies available. The volume and type of material that remains in the waste stream after diversion are key factors in determining the appropriate waste disposal technology.

WASTE MANAGEMENT SYSTEMS – A COOPERATIVE APPROACH

As the volume and types of waste have increased, quite often a community's tax base has not kept pace. Rural and small communities often have a smaller tax base, which limits the capability and money available to address waste management needs.

In several provinces, including the other Atlantic provinces, communities have pooled resources and established regional waste management systems, accomplishing together what is difficult to do individually. The geographic area and numbers of households included in a regional waste management system varies within and among provinces. In New Brunswick, for example, there are 12 regional waste management commissions; in Nova Scotia, Cape Breton is served by one central facility; and, Prince Edward Island is moving towards a single, island-wide waste management system.

A regional waste management system is not necessarily one disposal site – a system can be whatever a region needs in order to handle waste in an environmentally and economically acceptable manner. A system can integrate collection, diversion and disposal. It might include one central facility handling an expanded recycling program and disposal, combined with the use of one or more transfer stations.

Communities have found that adopting a cooperative approach to waste management has the advantage of economy of scale. Savings can be achieved through pooled financial, human and operational resources for fewer sites. Typically, a shared waste management system is managed by representatives from participating communities who are familiar with the area, its communities, industries, communications and transportation systems. By working together, communities are able to design cost-sharing mechanisms that allow for such factors as community size, transportation and type of waste.

WHERE DO WE GO FROM HERE?

Newfoundland and Labrador supports the goal of the Canadian Council of Ministers of the Environment for a 50 per cent reduction in the amount of waste going to landfills. We want to do this in a way that successfully balances community and environmental health with economic capability.

Government is committed to maximizing the environmental and economic benefits of waste diversion and of modern waste management disposal technologies.

Waste Diversion

- What are some specific strategies we can use to achieve 50 per cent reduction in materials going to landfill sites?
- Should waste diversion be voluntary or would disposal bans on specific materials be more effective?
- What are the barriers to increasing waste diversion in your household and your community to include glass, tins, paper, wood, newspaper or organic material?
- What are you prepared to pay for recycling programs to protect the environment for your children and grandchildren?

Waste Disposal

- What are the conditions or criteria you would want met in order for an engineered landfill to be an acceptable waste management facility for your community?
- Under what circumstances do you feel a modern incinerator, meeting government health and safety standards, would be an appropriate waste disposal method?

Waste Management Systems – A Cooperative Approach

- How can communities work together to achieve effective waste management that is both environmentally sound and economically feasible?
- What role, if any, does the provincial government have in assisting communities to share responsibility for solid waste management?

HOW WILL THE CONSULTATION PROCESS WORK?

Consultations will be conducted by the Advisory Committee, which is chaired by Newfoundland and Labrador Federation of Municipalities President Derm Flynn, and includes Jessie Bird of Cartwright, Priscilla Boutcher of Corner Brook, and Catherine Barrett of St. John's.

The roundtable discussions will be held in June in St. John's, Carbonear, Clarenville, Marystown, Gander, Grand Falls-Windsor, Lewisporte, Baie Verte, Corner Brook, Stephenville, St. Anthony, L'Anse au Clair, Happy Valley-Goose Bay, and Labrador West. Exact times and venues will be announced through local media. **Interested groups and individuals may attend these public meetings and/or submit written documents up to July 16, 2001.**

For information on the roundtable discussions, please contact the consultation coordinators by calling toll-free 1-866-729-1533 or local calls in the St. John's area at 729-1533, fax (709) 729-6969, or e-mail: wastemanagement@mail.gov.nf.ca

Written submissions may be handed in at the roundtable meeting in your area or may be sent to:

Waste Management Advisory Committee
c/o Department of Environment
4th Floor, West Block, Confederation Building
P.O. Box 8700
St. John's, NF A1B 4J6

Your input will help Government shape its provincial waste management policy and lead to a long-term strategy for solid waste management in Newfoundland and Labrador.

APPENDIX I

WASTE MANAGEMENT ADVISORY COMMITTEE

Derm Flynn

Mr. Flynn is the president of the Newfoundland and Labrador Federation of Municipalities. He has a long involvement in municipal government as a previous mayor of Wabush and mayor of the Town of Appleton, a position he currently holds. Mr. Flynn will chair the Advisory Committee.

Jessie Bird

Ms. Bird has been councillor, deputy mayor and mayor of Cartwright. She has also been the president and regional vice-president of the Combined Councils of Labrador. In addition to her specific understanding of Labrador and community government, Ms. Bird has had direct experience in environmental issues through her work as a conservation ranger with the Department of Forest Resources and Agrifoods and with the Sandwich Bay Watershed Authority.

Catherine Barrett

Ms. Barrett is the president of the Recycling Depot Operators' Association. The association represents the 37 Green Depots in the province and is an advocate for enhancing the recycling industry in Newfoundland and Labrador. Ms. Barrett is executive director of the Waterford Foundation.

Priscilla Boutcher

Ms. Boutcher is currently serving her fourth term as councillor on the Corner Brook City Council. She currently holds the position of deputy mayor and serves on various council committees. She is president of the Great Humber Joint Council, and is the northwest director on the Newfoundland and Labrador Federation of Municipalities board of directors.

APPENDIX II

WASTE MANAGEMENT - TERMS AND DEFINITIONS

Composting:

Controlled, aerobic bacterial decomposition of solid, heterogenous organic waste.

Corrugated Paper:

Paper or cardboard having either a series of wrinkles or folds, or alternating ridges and grooves.

Dioxin:

Any of several heterocyclic hydrocarbons occurring as persistent toxic impurities (in herbicides, especially TCDD, a carcinogenic dioxin found especially as a contaminant in 2, 4, 5-T, derived from thermal and chemical degradation of PCBs found in plastics and bleaches).

Diversion:

Separating specific waste materials from those designated for disposal by landfilling and incineration through reuse, recycling, recovery and composting.

Furan:

Flammable liquid heterocyclic compound.

Incinerator:

A furnace or container for burning of waste material.

Organic Material/Organic Waste:

The organic fraction of municipal solid waste which contains carbon and includes paper, wood, food scraps and yard trimmings.

Recycling:

The process by which materials, otherwise destined for disposal, are collected, reprocessed or re-manufactured and are reused.

Reuse:

The use of a product more than once in its same form, for the same purpose, e.g. a refillable soft drink bottle.

Sludge:

A solid or semi-solid deposit caused by precipitation or settling of solid matter such as from sewage or industrial processes.

Solid Waste:

Any garbage; or refuse; sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility; and other discarded material, resulting from industrial, domestic, commercial, mining, and agricultural operations, and from commercial activities.

Waste Exchange:

A network of stakeholders where wastes are made available to a list of persons/companies for reuse.

Waste Management:

Waste is managed when communities, industries and individuals take responsibility for disposing of their own waste. It is achieved through waste reduction, reuse, recycling, materials recovery, composting and landfilling.

Waste Stream:

The total flow of waste generation from private, commercial, institutional and industrial sources.

APPENDIX III

WASTE MANAGEMENT INITIATIVES ACROSS CANADA

Nova Scotia

- Formed the Resource Recovery Board in 1996 to manage a Solid Waste Resource Management Strategy and today has a network of over 90 enviro-depots and regional processing facilities creating thousands of jobs.
- Only province in Canada to ban compostable organic material from landfills and achieve 50 per cent reduction in waste to disposal by 2000.
- Based its waste management strategy on the principle that all waste diversion possibilities must be exhausted prior to disposal by either landfilling or incineration.

New Brunswick

- Adopted a Solid Waste Management Plan in 1987 creating 12 regional solid waste commissions.
- Environmental Trust Fund established to provide commissions with financial assistance for purchase of various pieces of recycling equipment.
- Beverage Containers Act proven a major stimulator of economic activity creating 250 full and part-time jobs in redemption centres.

Prince Edward Island

- In 1992, Prince Edward Island implemented a pilot project, Waste Watch, involving 100 households. In 26 weeks, the project diverted 31 tonnes of waste from landfill sites.
- Waste Watch expanded in 1994 to include 10,000 households, 1,000 businesses, and 1,000 cottages (approx. 25 per cent of provincial population).
- In 1999, government established a provincial Crown corporation, Island Waste Management Corporation, to manage, administer and provide solid waste management services province-wide.
- A new waste management facility is under construction and when completed the entire province will be served by three facilities accepting residential and commercial waste.

Quebec

- The province has a detailed 29-point Waste Management Plan for 1998 - 2008. It includes proposed actions and objectives for all sectors (government, municipal, private and citizenry) and will enable the province to maintain 8,748 existing jobs and create 1,852 new jobs over a period of a few years.

Ontario

- Corporations Supporting Recycling (CSR) has been part of Ontario recycling for more than 10 years and to date has committed over $45 million to the development of Ontario waste management infrastructure.

Manitoba

- In October 2000, the Manitoba government announced a four-year $2.2 million Waste Reduction Pollution and Prevention Fund to provide assistance grants for projects demonstrating benefits of waste reduction, pollution, prevention and environmental education. The fund focuses on developing public/private partnership and demon strating economic viability and economic benefits of reducing waste.

Alberta

- Alberta has a training centre operated by Olds College. Its objectives are to promote diversion from landfill, and to assist communities and municipalities with information updates, presentations and background information. It has developed close links with industry and government in Canada and the United States. It is presently developing distance delivery courses and customized training (as requested by all industry sectors).

Saskatchewan

- In Saskatchewan, the recycling effort has saved at least $1 million in social assistance payments by employing people with disabilities through the organization Saskatchewan Association of Rehabilitation Centres.

British Columbia

- In 1998, over 96,300 tonnes of organic matter were diverted from landfills in the Greater Vancouver Regional District as a result of residential backyard composting and municipal collection.
- Material recycled has increased from 19 per cent in 1990 to 42 per cent in 1998 and the total amount of waste disposed to landfills and incinerators decreased from 2.9 million tonnes in 1990 to 2.4 million in 1998.